

SEQUENCE LISTING

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<120> Assay

<130> 50318/011001

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<160> 36

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<210> 1

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1

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Val	Pro	Pro	Gln	Val	Leu	Ser	Glu	Pro	Asn	Glu	Glu	Ala	Gly	Ala	Ala
		35					40					45			

Leu	Ser	Pro	Leu	Pro	Glu	Val	Pro	Pro	Trp	Thr	Gly	Glu	Val	Ser	Pro
	50					55					60				

Ala	Gln	Arg	Asp	Gly	Gly	Ala	Leu	Gly	Arg	Gly	Pro	Trp	Asp	Ser	Ser
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Asp	Arg	Ser	Ala	Leu	Leu	Lys	Ser	Lys	Leu	Arg	Ala	Leu	Leu	Thr	Ala
				85					90					95	

Pro	Arg	Ser	Leu	Arg	Arg	Ser	Ser	Cys	Phe	Gly	Gly	Arg	Met	Asp	Arg
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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<213>	Homo sapiens				
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<213>	Homo sapiens				
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Asn Leu Leu Asp His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu Val					
	20		25		30
Val Pro Pro Gln Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala Ala					
	35		40		45
Leu Ser Pro Leu Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser Pro					
	50		55		60
Ala Gln Arg Asp Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser Ser					
65		70		75	80
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	85		90		95
Pro Arg					

<210> 4
 <211> 108
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 <213> Homo sapiens

<400> 4

His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly
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Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln
 20 25 30

Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr
 35 40 45

Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His
 50 55 60

Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met
 65 70 75 80

Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser
 85 90 95

Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
 100 105

<210> 5
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 5

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
 20 25 30

<210> 6
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 <212> PRT
 <213> Homo sapiens

<400> 6

His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly
 1 5 10 15

Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln
 20 25 30

Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr
 35 40 45

Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His
 50 55 60

Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg
 65 70 75

<210> 7
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 <212> DNA
 <213> Homo sapiens

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 120

ccgaatgaag aagcgggggc tgctctcagc cccctccctg aggtgcctcc ctggaccggg
 180

gaagtcagcc cagcccagag agatggaggt gccctcgggc ggggccctg ggactcctct
 240

gatcgatctg ccctcctaaa aagcaagctg agggcgctgc tactgcccc tcggagcctg
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cggagatcca gctgcttcgg gggcaggatg gacaggattg gagcccagag cggactgggc
 360

tgtaacagct tccggtac
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 <211> 84
 <212> DNA
 <213> Homo sapiens

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<210> 9
<211> 294
<212> DNA
<213> Homo sapiens

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120

ccgaatgaag aagcgggggc tgctctcagc cccctccctg aggtgcctcc ctggaccggg
180

gaagtcagcc cagcccagag agatggaggt gccctcgggc ggggccctg ggactcctc
240

gatcgatctg cctcctaaa aagcaagctg agggcgctgc tactgcccc tcgg
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<210> 10
<211> 324
<212> DNA
<213> Homo sapiens

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cgcaaccatt tgcagggcaa actgtcggag ctgcaggtgg agcagacatc cctggagccc
120

ctccaggaga gccccgtcc cacaggtgtc tggaagtccc gggaggtagc caccgagggc
180

atccgtgggc accgcaaat ggtcctctac accctgcggg caccacgaag cccaagatg
240

gtgcaagggt ctggctgctt tgggaggaag atggaccgga tcagctctc cagtggcctg
300

ggctgcaaag tgctgaggcg gcat
324

<210> 11
<211> 96
<212> DNA
<213> Homo sapiens

<400> 11

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tccagtggcc tgggctgcaa agtgctgagg cggcat
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<210> 12
<211> 228
<212> DNA
<213> Homo sapiens

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cgcaaccatt tgcagggcaa actgtcggag ctgcaggtgg agcagacatc cctggagccc
120

ctccaggaga gccccgtcc cacaggtgtc tggaagtccc gggaggtagc caccgagggc
180

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<210> 13
<211> 25
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 13

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Ser	Lys	Leu	Arg	Ala	Leu	Leu	Thr	Ala
			20					25

<210> 14
<211> 107
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 14

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20 25 30

Val Glu Gln Thr Ser Glu Asp Glu Val Val Pro Pro Gln Val Leu Ser
35 40 45

Glu Pro Asn Glu Glu Ala Gly Ala Ala Leu Ser Pro Leu Pro Glu Val
50 55 60

Pro Pro Trp Thr Gly Glu Val Ser Pro Ala Gln Arg Asp Gly Gly Ala
65 70 75 80

Leu Gly Arg Gly Pro Trp Asp Ser Ser Asp Arg Ser Ala Leu Leu Lys
85 90 95

Ser Lys Leu Arg Ala Leu Leu Thr Ala Pro Arg
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<210> 15
<211> 81
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 15

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1 5 10 15

Gly Lys Leu Ser Asp His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu
20 25 30

Val Val Pro Pro Gln Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala
35 40 45

Ala Leu Ser Pro Leu Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser
50 55 60

Pro Ala Gln Arg Asp Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser
65 70 75 80

Ser

<210> 16
 <211> 4
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic peptide

<400> 16

Gly Lys Tyr Gly
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<210> 17
 <211> 174
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Synthetic peptide

<400> 17

His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly
 1 5 10 15

Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln
 20 25 30

Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr
 35 40 45

Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His
 50 55 60

Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Asn Pro Met Tyr
 65 70 75 80

Asn Ala Val Ser Asn Ala Asp Leu Met Asp Phe Lys Asn Leu Leu Asp
 85 90 95

His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu Val Val Pro Pro Gln
 100 105 110

Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala Ala Leu Ser Pro Leu
 115 120 125

Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser Pro Ala Gln Arg Asp
130 135 140

Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser Ser Asp Arg Ser Ala
145 150 155 160

Leu Leu Lys Ser Lys Leu Arg Ala Leu Leu Thr Ala Pro Arg
165 170

<210> 18
<211> 41
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 18

Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn His Leu Gln
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Gly Lys Leu Ser Gly Glu Val Ser Pro Ala Gln Arg Asp Gly Gly Ala
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Leu Gly Arg Gly Pro Trp Asp Ser Ser
35 40

<210> 19
<211> 234
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 19

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20 25 30

Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr
35 40 45

Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His
50 55 60

Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met
65 70 75 80

Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser
85 90 95

Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His Asn Pro Met Tyr
100 105 110

Asn Ala Val Ser Asn Ala Asp Leu Met Asp Phe Lys Asn Leu Leu Asp
115 120 125

His Leu Glu Glu Lys Met Pro Leu Glu Asp Glu Val Val Pro Pro Gln
130 135 140

Val Leu Ser Glu Pro Asn Glu Glu Ala Gly Ala Ala Leu Ser Pro Leu
145 150 155 160

Pro Glu Val Pro Pro Trp Thr Gly Glu Val Ser Pro Ala Gln Arg Asp
165 170 175

Gly Gly Ala Leu Gly Arg Gly Pro Trp Asp Ser Ser Asp Arg Ser Ala
180 185 190

Leu Leu Lys Ser Lys Leu Arg Ala Leu Leu Thr Ala Pro Arg Ser Leu
195 200 205

Arg Arg Ser Ser Cys Phe Gly Gly Arg Met Asp Arg Ile Gly Ala Gln
210 215 220

Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
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<210> 20
<211> 31
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic peptide

<400> 20

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Gly Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
 20 25 30

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 <211> 75
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic nucleic acid

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gcgctgctca ctgcc
 75

<210> 22
 <211> 321
 <212> DNA
 <213> Artificial sequence

<220>
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<400> 22
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cgcaaccatt tgcagggcaa actgtcggag ctgcaggtgg agcagacatc cgaagatgag
 120

gtcgtgcccc cacaagtgct cagtgcgccc aatgaagaag cgggggctgc tctcagcccc
 180

ctccctgagg tgcctccctg gaccggggaa gtcagcccag ccagagaga tggaggtgcc
 240

ctcgggctgg gccctggga ctctctgat cgatctgccc tcctaaaaag caagctgagg
 300

gcgctgctca ctgcccctcg g
 321

<210> 23
 <211> 241
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic nucleic acid

 <400> 23
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 ccatttgga gaaaagatgc ctttagaaga tgaggtcgtg cccccacaag tgctcagtga
 120

 gccgaatgaa gaagcggggg ctgctctcag cccctccct gaggtgcctc cctggaccgg
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 ggaagtcagc ccagcccaga gagatggagg tgccctcggg cggggccctc gggactcctc
 240

 t
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 <210> 24
 <211> 522
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> Synthetic nucleic acid

 <400> 24
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 cgcaaccatt tgcagggcaa actgtcggag ctgcaggtgg agcagacatc cctggagccc
 120

 ctccaggaga gccccgtcc cacaggtgtc tggaagtccc gggaggtagc caccgagggc
 180

 atccgtgggc accgcaaaat ggtcctctac accctgcggg caccacgaaa tcccatgtac
 240

 aatgccgtgt ccaacgcaga cctgatggat ttcaagaatt tgctggacca tttggaagaa
 300

 aagatgcctt tagaagatga ggtcgtgccc ccacaagtgc tcagttagcc gaatgaagaa
 360

 gcgggggctg ctctcagccc cctccctgag gtgcctccct ggaccgggga agtcagccca
 420

 gccagagag atggaggtgc cctcgggcgg ggcccctggg actcctctga tcgatctgcc
 480

 ctctaaaaa gcaagctgag ggcgtgctc actgcccctc gg
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<210> 25
 <211> 123
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic nucleic acid

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 ggggaagtca gccagccca gagagatgga ggtgccctcg ggcggggccc ctgggactcc
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 tct
 123

<210> 26
 <211> 702
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic nucleic acid

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 120
 ctccaggaga gccccgtcc cacaggtgtc tggaagtccc gggaggtagc caccgagggc
 180
 atccgtgggc accgcaaaat ggtcctctac accctgcggg caccacgaag cccaagatg
 240
 gtgcaagggc ctggctgctt tgggaggaag atggaccgga tcagctcttc cagtggcctg
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 ggctgcaaag tgctgaggcg gcataatccc atgtacaatg ccgtgtccaa cgcagacctg
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 atggatttca agaatttgct ggaccatttg gaagaaaaga tgcctttaga agatgaggtc
 420
 gtgccccac aagtgtcag tgagccgaat gaagaagcgg gggctgctct cagccccctc
 480
 cctgaggtgc ctccctggac cggggaagtc agcccagccc agagagatgg aggtgccttc
 540

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600

ctgctcactg cccctcggag cctgcggaga tccagctgct tcgggggcag gatggacagg
660

attggagccc agagcggact gggctgtaac agcttccggt ac
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<210> 27
<211> 93
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic nucleic acid

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60

cagagcggac tgggctgtaa cagcttccgg tac
93

<210> 28
<211> 27
<212> DNA
<213> Artificial sequence

<220>
<223> Primer

<400> 28
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<210> 29
<211> 24
<212> DNA
<213> Artificial sequence

<220>
<223> Primer

<400> 29
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24

<210> 30
<211> 24
<212> DNA
<213> Artificial sequence

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<400>  31
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<220>
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<400>  32
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25

<210>  33
<211>  1061
<212>  PRT
<213>  Homo sapiens

<400>  33

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20          25          30

Gly  Asn  Leu  Thr  Val  Ala  Val  Val  Leu  Pro  Leu  Ala  Asn  Thr  Ser  Tyr
35          40          45

Pro  Trp  Ser  Trp  Ala  Arg  Val  Gly  Pro  Ala  Val  Glu  Leu  Ala  Leu  Ala
50          55          60

```

Gln Val Lys Ala Arg Pro Asp Leu Leu Pro Gly Trp Thr Val Arg Thr
 65 70 75 80

Val Leu Gly Ser Ser Glu Asn Ala Leu Gly Val Cys Ser Asp Thr Ala
 85 90 95

Ala Pro Leu Ala Ala Val Asp Leu Lys Trp Glu His Asn Pro Ala Val
 100 105 110

Phe Leu Gly Pro Gly Cys Val Tyr Ala Ala Ala Pro Val Gly Arg Phe
 115 120 125

Thr Ala His Trp Arg Val Pro Leu Leu Thr Ala Gly Ala Pro Ala Leu
 130 135 140

Gly Phe Gly Val Lys Asp Glu Tyr Ala Leu Thr Thr Arg Ala Gly Pro
 145 150 155 160

Ser Tyr Ala Lys Leu Gly Asp Phe Val Ala Ala Leu His Arg Arg Leu
 165 170 175

Gly Trp Glu Arg Gln Ala Leu Met Leu Tyr Ala Tyr Arg Pro Gly Asp
 180 185 190

Glu Glu His Cys Phe Phe Leu Val Glu Gly Leu Phe Met Arg Val Arg
 195 200 205

Asp Arg Leu Asn Ile Thr Val Asp His Leu Glu Phe Ala Glu Asp Asp
 210 215 220

Leu Ser His Tyr Thr Arg Leu Leu Arg Thr Met Pro Arg Lys Gly Arg
 225 230 235 240

Val Ile Tyr Ile Cys Ser Ser Pro Asp Ala Phe Arg Thr Leu Met Leu
 245 250 255

Leu Ala Leu Glu Ala Gly Leu Cys Gly Glu Asp Tyr Val Phe Phe His
 260 265 270

Leu Asp Ile Phe Gly Gln Ser Leu Gln Gly Gly Gln Gly Pro Ala Pro
 275 280 285

Arg Arg Pro Trp Glu Arg Gly Asp Gly Gln Asp Val Ser Ala Arg Gln

290		295		300
Ala Phe Gln Ala Ala Lys Ile Ile Thr Tyr Lys Asp Pro Asp Asn Pro				
305		310		315 320
Glu Tyr Leu Glu Phe Leu Lys Gln Leu Lys His Leu Ala Tyr Glu Gln				
	325		330	335
Phe Asn Phe Thr Met Glu Asp Gly Leu Val Asn Thr Ile Pro Ala Ser				
	340		345	350
Phe His Asp Gly Leu Leu Leu Tyr Ile Gln Ala Val Thr Glu Thr Leu				
	355		360	365
Ala His Gly Gly Thr Val Thr Asp Gly Glu Asn Ile Thr Gln Arg Met				
	370		375	380
Trp Asn Arg Ser Phe Gln Gly Val Thr Gly Tyr Leu Lys Ile Asp Ser				
385		390		395 400
Ser Gly Asp Arg Glu Thr Asp Phe Ser Leu Trp Asp Met Asp Pro Glu				
	405		410	415
Asn Gly Ala Phe Arg Val Val Leu Asn Tyr Asn Gly Thr Ser Gln Glu				
	420		425	430
Leu Val Ala Val Ser Gly Arg Lys Leu Asn Trp Pro Leu Gly Tyr Pro				
	435		440	445
Pro Pro Asp Ile Pro Lys Cys Gly Phe Asp Asn Glu Asp Pro Ala Cys				
	450		455	460
Asn Gln Asp His Leu Ser Thr Leu Glu Val Leu Ala Leu Val Gly Ser				
465		470		475 480
Leu Ser Leu Leu Gly Ile Leu Ile Val Ser Phe Phe Ile Tyr Arg Lys				
	485		490	495
Met Gln Leu Glu Lys Glu Leu Ala Ser Glu Leu Trp Arg Val Arg Trp				
	500		505	510
Glu Asp Val Glu Pro Ser Ser Leu Glu Arg His Leu Arg Ser Ala Gly				
	515		520	525

Ser Arg Leu Thr Leu Ser Gly Arg Gly Ser Asn Tyr Gly Ser Leu Leu
 530 535 540

Thr Thr Glu Gly Gln Phe Gln Val Phe Ala Lys Thr Ala Tyr Tyr Lys
 545 550 555 560

Gly Asn Leu Val Ala Val Lys Arg Val Asn Arg Lys Arg Ile Glu Leu
 565 570 575

Thr Arg Lys Val Leu Phe Glu Leu Lys His Met Arg Asp Val Gln Asn
 580 585 590

Glu His Leu Thr Arg Phe Val Gly Ala Cys Thr Asp Pro Pro Asn Ile
 595 600 605

Cys Ile Leu Thr Glu Tyr Cys Pro Arg Gly Ser Leu Gln Asp Ile Leu
 610 615 620

Glu Asn Glu Ser Ile Thr Leu Asp Trp Met Phe Arg Tyr Ser Leu Thr
 625 630 635 640

Asn Asp Ile Val Lys Gly Met Leu Phe Leu His Asn Gly Ala Ile Cys
 645 650 655

Ser His Gly Asn Leu Lys Ser Ser Asn Cys Val Val Asp Gly Arg Phe
 660 665 670

Val Leu Lys Ile Thr Asp Tyr Gly Leu Glu Ser Phe Arg Asp Leu Asp
 675 680 685

Pro Glu Gln Gly His Thr Val Tyr Ala Lys Lys Leu Trp Thr Ala Pro
 690 695 700

Glu Leu Leu Arg Met Ala Ser Pro Pro Val Arg Gly Ser Gln Ala Gly
 705 710 715 720

Asp Val Tyr Ser Phe Gly Ile Ile Leu Gln Glu Ile Ala Leu Arg Ser
 725 730 735

Gly Val Phe His Val Glu Gly Leu Asp Leu Ser Pro Lys Glu Ile Ile
 740 745 750

Glu Arg Val Thr Arg Gly Glu Gln Pro Pro Phe Arg Pro Ser Leu Ala
755 760 765

Leu Gln Ser His Leu Glu Glu Leu Gly Leu Leu Met Gln Arg Cys Trp
770 775 780

Ala Glu Asp Pro Gln Glu Arg Pro Pro Phe Gln Gln Ile Arg Leu Thr
785 790 795 800

Leu Arg Lys Phe Asn Arg Glu Asn Ser Ser Asn Ile Leu Asp Asn Leu
805 810 815

Leu Ser Arg Met Glu Gln Tyr Ala Asn Asn Leu Glu Glu Leu Val Glu
820 825 830

Glu Arg Thr Gln Ala Tyr Leu Glu Glu Lys Arg Lys Ala Glu Ala Leu
835 840 845

Leu Tyr Gln Ile Leu Pro His Ser Val Ala Glu Gln Leu Lys Arg Gly
850 855 860

Glu Thr Val Gln Ala Glu Ala Phe Asp Ser Val Thr Ile Tyr Phe Ser
865 870 875 880

Asp Ile Val Gly Phe Thr Ala Leu Ser Ala Glu Ser Thr Pro Met Gln
885 890 895

Val Val Thr Leu Leu Asn Asp Leu Tyr Thr Cys Phe Asp Ala Val Ile
900 905 910

Asp Asn Phe Asp Val Tyr Lys Val Glu Thr Ile Gly Asp Ala Tyr Met
915 920 925

Val Val Ser Gly Leu Pro Val Arg Asn Gly Arg Leu His Ala Cys Glu
930 935 940

Val Ala Arg Met Ala Leu Ala Leu Leu Asp Ala Val Arg Ser Phe Arg
945 950 955 960

Ile Arg His Arg Pro Gln Glu Gln Leu Arg Leu Arg Ile Gly Ile His
965 970 975

Thr Gly Pro Val Cys Ala Gly Val Val Gly Leu Lys Met Pro Arg Tyr
980 985 990

Cys Leu Phe Gly Asp Thr Val Asn Thr Ala Ser Arg Met Glu Ser Asn
995 1000 1005

Gly Glu Ala Leu Lys Ile His Leu Ser Ser Glu Thr Lys Ala Val
1010 1015 1020

Leu Glu Glu Phe Gly Gly Phe Glu Leu Glu Leu Arg Gly Asp Val
1025 1030 1035

Glu Met Lys Gly Lys Gly Lys Val Arg Thr Tyr Trp Leu Leu Gly
1040 1045 1050

Glu Arg Gly Ser Ser Thr Arg Gly
1055 1060

<210> 34
<211> 430
<212> PRT
<213> Homo sapiens

<400> 34

Gly Asn Leu Thr Val Ala Val Val Leu Pro Leu Ala Asn Thr Ser Tyr
1 5 10 15

Pro Trp Ser Trp Ala Arg Val Gly Pro Ala Val Glu Leu Ala Leu Ala
20 25 30

Gln Val Lys Ala Arg Pro Asp Leu Leu Pro Gly Trp Thr Val Arg Thr
35 40 45

Val Leu Gly Ser Ser Glu Asn Ala Leu Gly Val Cys Ser Asp Thr Ala
50 55 60

Ala Pro Leu Ala Ala Val Asp Leu Lys Trp Glu His Asn Pro Ala Val
65 70 75 80

Phe Leu Gly Pro Gly Cys Val Tyr Ala Ala Ala Pro Val Gly Arg Phe
85 90 95

Thr Ala His Trp Arg Val Pro Leu Leu Thr Ala Gly Ala Pro Ala Leu
100 105 110

Gly Phe Gly Val Lys Asp Glu Tyr Ala Leu Thr Thr Arg Ala Gly Pro
 115 120 125

Ser Tyr Ala Lys Leu Gly Asp Phe Val Ala Ala Leu His Arg Arg Leu
 130 135 140

Gly Trp Glu Arg Gln Ala Leu Met Leu Tyr Ala Tyr Arg Pro Gly Asp
 145 150 155 160

Glu Glu His Cys Phe Phe Leu Val Glu Gly Leu Phe Met Arg Val Arg
 165 170 175

Asp Arg Leu Asn Ile Thr Val Asp His Leu Glu Phe Ala Glu Asp Asp
 180 185 190

Leu Ser His Tyr Thr Arg Leu Leu Arg Thr Met Pro Arg Lys Gly Arg
 195 200 205

Val Ile Tyr Ile Cys Ser Ser Pro Asp Ala Phe Arg Thr Leu Met Leu
 210 215 220

Leu Ala Leu Glu Ala Gly Leu Cys Gly Glu Asp Tyr Val Phe Phe His
 225 230 235 240

Leu Asp Ile Phe Gly Gln Ser Leu Gln Gly Gly Gln Gly Pro Ala Pro
 245 250 255

Arg Arg Pro Trp Glu Arg Gly Asp Gly Gln Asp Val Ser Ala Arg Gln
 260 265 270

Ala Phe Gln Ala Ala Lys Ile Ile Thr Tyr Lys Asp Pro Asp Asn Pro
 275 280 285

Glu Tyr Leu Glu Phe Leu Lys Gln Leu Lys His Leu Ala Tyr Glu Gln
 290 295 300

Phe Asn Phe Thr Met Glu Asp Gly Leu Val Asn Thr Ile Pro Ala Ser
 305 310 315 320

Phe His Asp Gly Leu Leu Leu Tyr Ile Gln Ala Val Thr Glu Thr Leu
 325 330 335

Ala His Gly Gly Thr Val Thr Asp Gly Glu Asn Ile Thr Gln Arg Met
 340 345 350

Trp Asn Arg Ser Phe Gln Gly Val Thr Gly Tyr Leu Lys Ile Asp Ser
 355 360 365

Ser Gly Asp Arg Glu Thr Asp Phe Ser Leu Trp Asp Met Asp Pro Glu
 370 375 380

Asn Gly Ala Phe Arg Val Val Leu Asn Tyr Asn Gly Thr Ser Gln Glu
 385 390 395 400

Leu Val Ala Val Ser Gly Arg Lys Leu Asn Trp Pro Leu Gly Tyr Pro
 405 410 415

Pro Pro Asp Ile Pro Lys Cys Gly Phe Asp Asn Glu Asp Pro
 420 425 430

<210> 35
 <211> 1047
 <212> PRT
 <213> Homo sapiens

<400> 35

Met Ala Leu Pro Ser Leu Leu Leu Leu Val Ala Ala Leu Ala Gly Gly
 1 5 10 15

Val Arg Pro Pro Gly Ala Arg Asn Leu Thr Leu Ala Val Val Leu Pro
 20 25 30

Glu His Asn Leu Ser Tyr Ala Trp Ala Trp Pro Arg Val Gly Pro Ala
 35 40 45

Val Ala Leu Ala Val Glu Ala Leu Gly Arg Ala Leu Pro Val Asp Leu
 50 55 60

Arg Phe Val Ser Ser Glu Leu Glu Gly Ala Cys Ser Glu Tyr Leu Ala
 65 70 75 80

Pro Leu Ser Ala Val Asp Leu Lys Leu Tyr His Asp Pro Asp Leu Leu
 85 90 95

Leu Gly Pro Gly Cys Val Tyr Pro Ala Ala Ser Val Ala Arg Phe Ala

100					105					110					
Ser	His	Trp	Arg	Leu	Pro	Leu	Leu	Thr	Ala	Gly	Ala	Val	Ala	Ser	Gly
		115					120					125			
Phe	Ser	Ala	Lys	Asn	Asp	His	Tyr	Arg	Thr	Leu	Val	Arg	Thr	Gly	Pro
	130					135					140				
Ser	Ala	Pro	Lys	Leu	Gly	Glu	Phe	Val	Val	Thr	Leu	His	Gly	His	Phe
145					150					155					160
Asn	Trp	Thr	Ala	Arg	Ala	Ala	Leu	Leu	Tyr	Leu	Asp	Ala	Arg	Thr	Asp
				165					170					175	
Asp	Arg	Pro	His	Tyr	Phe	Thr	Ile	Glu	Gly	Val	Phe	Glu	Ala	Leu	Gln
			180					185					190		
Gly	Ser	Asn	Leu	Ser	Val	Gln	His	Gln	Val	Tyr	Ala	Arg	Glu	Pro	Gly
		195					200					205			
Gly	Pro	Glu	Gln	Ala	Thr	His	Phe	Ile	Arg	Ala	Asn	Gly	Arg	Ile	Val
	210					215					220				
Tyr	Ile	Cys	Gly	Pro	Leu	Glu	Met	Leu	His	Glu	Ile	Leu	Leu	Gln	Ala
225					230					235					240
Gln	Arg	Glu	Asn	Leu	Thr	Asn	Gly	Asp	Tyr	Val	Phe	Phe	Tyr	Leu	Asp
				245					250					255	
Val	Phe	Gly	Glu	Ser	Leu	Arg	Ala	Gly	Pro	Thr	Arg	Ala	Thr	Gly	Arg
			260					265					270		
Pro	Trp	Gln	Asp	Asn	Arg	Thr	Arg	Glu	Gln	Ala	Gln	Ala	Leu	Arg	Glu
		275					280					285			
Ala	Phe	Gln	Thr	Val	Leu	Val	Ile	Thr	Tyr	Arg	Glu	Pro	Pro	Asn	Pro
	290					295					300				
Glu	Tyr	Gln	Glu	Phe	Gln	Asn	Arg	Leu	Leu	Ile	Arg	Ala	Arg	Glu	Asp
305					310					315					320
Phe	Gly	Val	Glu	Leu	Gly	Pro	Ser	Leu	Met	Asn	Leu	Ile	Ala	Gly	Cys
				325					330					335	

Phe Tyr Asp Gly Ile Leu Leu Tyr Ala Glu Val Leu Asn Glu Thr Ile
 340 345 350

Gln Glu Gly Gly Thr Arg Glu Asp Gly Leu Arg Ile Val Glu Lys Met
 355 360 365

Gln Gly Arg Arg Tyr His Gly Val Thr Gly Leu Val Val Met Asp Lys
 370 375 380

Asn Asn Asp Arg Glu Thr Asp Phe Val Leu Trp Ala Met Gly Asp Leu
 385 390 395 400

Asp Ser Gly Asp Phe Gln Pro Ala Ala His Tyr Ser Gly Ala Glu Lys
 405 410 415

Gln Ile Trp Trp Thr Gly Arg Pro Ile Pro Trp Val Lys Gly Ala Pro
 420 425 430

Pro Ser Asp Asn Pro Pro Cys Ala Phe Asp Leu Asp Asp Pro Ser Cys
 435 440 445

Asp Lys Thr Pro Leu Ser Thr Leu Ala Ile Val Ala Leu Gly Thr Gly
 450 455 460

Ile Thr Phe Ile Met Phe Gly Val Ser Ser Phe Leu Ile Phe Arg Lys
 465 470 475 480

Leu Met Leu Glu Lys Glu Leu Ala Ser Met Leu Trp Arg Ile Arg Trp
 485 490 495

Glu Glu Leu Gln Phe Gly Asn Ser Glu Arg Tyr His Lys Gly Ala Gly
 500 505 510

Ser Arg Leu Thr Leu Ser Leu Arg Gly Ser Ser Tyr Gly Ser Leu Met
 515 520 525

Thr Ala His Gly Lys Tyr Gln Ile Phe Ala Asn Thr Gly His Phe Lys
 530 535 540

Gly Asn Val Val Ala Ile Lys His Val Asn Lys Lys Arg Ile Glu Leu
 545 550 555 560

Thr Arg Gln Val Leu Phe Glu Leu Lys His Met Arg Asp Val Gln Phe
 565 570 575

Asn His Leu Thr Arg Phe Ile Gly Ala Cys Ile Asp Pro Pro Asn Ile
 580 585 590

Cys Ile Val Thr Glu Tyr Cys Pro Arg Gly Ser Leu Gln Asp Ile Leu
 595 600 605

Glu Asn Asp Ser Ile Asn Leu Asp Trp Met Phe Arg Tyr Ser Leu Ile
 610 615 620

Asn Asp Leu Val Lys Gly Met Ala Phe Leu His Asn Ser Ile Ile Ser
 625 630 635 640

Ser His Gly Ser Leu Lys Ser Ser Asn Cys Val Val Asp Ser Arg Phe
 645 650 655

Val Leu Lys Ile Thr Asp Tyr Gly Leu Ala Ser Phe Arg Ser Thr Ala
 660 665 670

Glu Pro Asp Asp Ser His Ala Leu Tyr Ala Lys Lys Leu Trp Thr Ala
 675 680 685

Pro Glu Leu Leu Ser Gly Asn Pro Leu Pro Thr Thr Gly Met Gln Lys
 690 695 700

Ala Asp Val Tyr Ser Phe Gly Ile Ile Leu Gln Glu Ile Ala Leu Arg
 705 710 715 720

Ser Gly Pro Phe Tyr Leu Glu Gly Leu Asp Leu Ser Pro Lys Glu Ile
 725 730 735

Val Gln Lys Val Arg Asn Gly Gln Arg Pro Tyr Phe Arg Pro Ser Ile
 740 745 750

Asp Arg Thr Gln Leu Asn Glu Glu Leu Val Leu Leu Met Glu Arg Cys
 755 760 765

Trp Ala Gln Asp Pro Ala Glu Arg Pro Asp Phe Gly Gln Ile Lys Gly
 770 775 780

Phe Ile Arg Arg Phe Asn Lys Glu Gly Gly Thr Ser Ile Leu Asp Asn
785 790 795 800

Leu Leu Leu Arg Met Glu Gln Tyr Ala Asn Asn Leu Glu Lys Leu Val.
805 810 815

Glu Glu Arg Thr Gln Ala Tyr Leu Glu Glu Lys Arg Lys Ala Glu Ala
820 825 830

Leu Leu Tyr Gln Ile Leu Pro His Ser Val Ala Glu Gln Leu Lys Arg
835 840 845

Gly Glu Thr Val Gln Ala Glu Ala Phe Asp Ser Val Thr Ile Tyr Phe
850 855 860

Ser Asp Ile Val Gly Phe Thr Ala Leu Ser Ala Glu Ser Thr Pro Met
865 870 875 880

Gln Val Val Thr Leu Leu Asn Asp Leu Tyr Thr Cys Phe Asp Ala Ile
885 890 895

Ile Asp Asn Phe Asp Val Tyr Lys Val Glu Thr Ile Gly Asp Ala Tyr
900 905 910

Met Val Val Ser Gly Leu Pro Gly Arg Asn Gly Gln Arg His Ala Pro
915 920 925

Glu Ile Ala Arg Met Ala Leu Ala Leu Leu Asp Ala Val Ser Ser Phe
930 935 940

Arg Ile Arg His Arg Pro His Asp Gln Leu Arg Leu Arg Ile Gly Val
945 950 955 960

His Thr Gly Pro Val Cys Ala Gly Val Val Gly Leu Lys Met Pro Arg
965 970 975

Tyr Cys Leu Phe Gly Asp Thr Val Asn Thr Ala Ser Arg Met Glu Ser
980 985 990

Asn Gly Gln Ala Leu Lys Ile His Val Ser Ser Thr Thr Lys Asp Ala
995 1000 1005

Leu Asp Glu Leu Gly Cys Phe Gln Leu Glu Leu Arg Gly Asp Val

1010		1015		1020
Glu Met Lys Gly Lys Gly Lys Met Arg Thr Tyr Trp Leu Leu Gly				
1025		1030		1035
Glu Arg Lys Gly Pro Pro Gly Leu Leu				
1040		1045		
<210>	36			
<211>	541			
<212>	PRT			
<213>	homo sapiens			
<400>	36			
Met Pro Ser Leu Leu Val Leu Thr Phe Ser Pro Cys Val Leu Leu Gly				
1	5		10	15
Trp Ala Leu Leu Ala Gly Gly Thr Gly Gly Gly Gly Val Gly Gly Gly				
	20		25	30
Gly Gly Gly Ala Gly Ile Gly Gly Gly Arg Gln Gly Arg Glu Ala Leu				
	35		40	45
Pro Pro Gln Lys Ile Glu Val Leu Val Leu Leu Pro Gln Asp Asp Ser				
	50		55	60
Tyr Leu Phe Ser Leu Thr Arg Val Arg Pro Ala Ile Glu Tyr Ala Leu				
65		70	75	80
Arg Ser Val Glu Gly Asn Gly Thr Gly Arg Arg Leu Leu Pro Pro Gly				
	85		90	95
Thr Arg Phe Gln Val Ala Tyr Glu Asp Ser Asp Cys Gly Asn Arg Ala				
	100		105	110
Leu Phe Ser Leu Val Asp Arg Val Ala Ala Ala Arg Gly Ala Lys Pro				
	115		120	125
Asp Leu Ile Leu Gly Pro Val Cys Glu Tyr Ala Ala Ala Pro Val Ala				
	130		135	140
Arg Leu Ala Ser His Trp Asp Leu Pro Met Leu Ser Ala Gly Ala Leu				
145		150	155	160

Ala	Ala	Gly	Phe	Gln	His	Lys	Asp	Ser	Glu	Tyr	Ser	His	Leu	Thr	Arg	165	170	175
Val	Ala	Pro	Ala	Tyr	Ala	Lys	Met	Gly	Glu	Met	Met	Leu	Ala	Leu	Phe	180	185	190
Arg	His	His	His	Trp	Ser	Arg	Ala	Ala	Leu	Val	Tyr	Ser	Asp	Asp	Lys	195	200	205
Leu	Glu	Arg	Asn	Cys	Tyr	Phe	Thr	Leu	Glu	Gly	Val	His	Glu	Val	Phe	210	215	220
Gln	Glu	Glu	Gly	Leu	His	Thr	Ser	Ile	Tyr	Ser	Phe	Asp	Glu	Thr	Lys	225	230	235
Asp	Leu	Asp	Leu	Glu	Asp	Ile	Val	Arg	Asn	Ile	Gln	Ala	Ser	Glu	Arg	245	250	255
Val	Val	Ile	Met	Cys	Ala	Ser	Ser	Asp	Thr	Ile	Arg	Ser	Ile	Met	Leu	260	265	270
Val	Ala	His	Arg	His	Gly	Met	Thr	Ser	Gly	Asp	Tyr	Ala	Phe	Phe	Asn	275	280	285
Ile	Glu	Leu	Phe	Asn	Ser	Ser	Ser	Tyr	Gly	Asp	Gly	Ser	Trp	Lys	Arg	290	295	300
Gly	Asp	Lys	His	Asp	Phe	Glu	Ala	Lys	Gln	Ala	Tyr	Ser	Ser	Leu	Gln	305	310	315
Thr	Val	Thr	Leu	Leu	Arg	Thr	Val	Lys	Pro	Glu	Phe	Glu	Lys	Phe	Ser	325	330	335
Met	Glu	Val	Lys	Ser	Ser	Val	Glu	Lys	Gln	Gly	Leu	Asn	Met	Glu	Asp	340	345	350
Tyr	Val	Asn	Met	Phe	Val	Glu	Gly	Phe	His	Asp	Ala	Ile	Leu	Leu	Tyr	355	360	365
Val	Leu	Ala	Leu	His	Glu	Val	Leu	Arg	Ala	Gly	Tyr	Ser	Lys	Lys	Asp	370	375	380

Gly Gly Lys Ile Ile Gln Gln Thr Trp Asn Arg Thr Phe Glu Gly Ile
 385 390 395 400

Ala Gly Gln Val Ser Ile Asp Ala Asn Gly Asp Arg Tyr Gly Asp Phe
 405 410 415

Ser Val Ile Ala Met Thr Asp Val Glu Ala Gly Thr Gln Glu Val Ile
 420 425 430

Gly Asp Tyr Phe Gly Lys Glu Gly Arg Phe Glu Met Arg Pro Asn Val
 435 440 445

Lys Tyr Pro Trp Gly Pro Leu Lys Leu Arg Ile Asp Glu Asn Arg Ile
 450 455 460

Val Glu His Thr Asn Ser Ser Pro Cys Lys Ser Ser Gly Gly Leu Glu
 465 470 475 480

Glu Ser Ala Val Thr Gly Ile Val Val Gly Ala Leu Leu Gly Ala Gly
 485 490 495

Leu Leu Met Ala Phe Tyr Phe Phe Arg Lys Lys Tyr Arg Ile Thr Ile
 500 505 510

Glu Arg Arg Thr Gln Gln Glu Glu Ser Asn Leu Gly Lys His Arg Glu
 515 520 525

Leu Arg Glu Asp Ser Ile Arg Ser His Phe Ser Val Ala
 530 535 540